

REMARKS

Pursuant to 37 C.F.R. § 1.111, Applicant respectfully requests reconsideration of the claim rejections set forth in the Office communication dated February 20, 2008. Assignee takes this opportunity to thank the Examiner for the careful review of the specification, claims, and drawings of the application.

I. Information Disclosure Statement

The Office Action notes that the information disclosure statement filed on September 2, 2005 was not considered. It appears that the same publication number was listed for U.S. Patent document, BA and BB. The Office Action also noted that copies of U.S. Patent documents BA, BB, and BC were missing.

In regard to the duplicate publication numbers, Assignee respectfully submits a First Supplemental IDS and corresponding PTO form 1449 with this paper that lists the corrected data. Assignee respectfully requests consideration and entry of the listed references.

In regard to the missing copies of U.S. Patent documents BA, BB, and BC, 37 C.F.R. § 1.98(a)(2)(ii) notes that the Assignee is only required to provide a legible copy of: “[e]ach publication or that portion which caused it to be listed, other than U.S. patents and U.S. patent application publications unless required by the Office.” Since the Office Action specifically requests copies of documents BA, BB, and BC, they are provided with this response.

II. Drawings

The Drawings were objected to because “element D” was not included in Figure 3. In response, Assignee has amended the Specification, as shown on page 2 of this paper, to correct the reference to element D with a reference to element B found on page 15, line 3 of the originally filed specification. Therefore, Applicant respectfully requests that the Examiner withdraw the Drawing objections set forth in the Office Action.

III. Specification

The Specification was objected to because of inconsistencies. Assignee has amended paragraph [044] and [066] to overcome the Specification objections. More specifically, Assignee amended paragraph [044], which originally recited a “net traffic filter 222,” to recite “a channel filter 222.” In addition, Assignee amended paragraph [066], which originally recited “MP 102 transmits a net traffic result as outgoing voice conference traffic 416 to the EP2,” to “MP 104 transmits a net traffic result as outgoing voice conference traffic 416 to the EP2.” No new matter was added as a result of the amendments because the amendments are supported in the originally filed specification and/or Figures.

IV. Claim Rejections – 35 U.S.C. § 112, second paragraph

Claims 3, 5, 14, and 16 were rejected pursuant to 35 U.S.C. § 112, second paragraph because the claims recite the limitation “n” and there is no specific definition or description of the intended meaning. One skilled in the art, at the time the application was filed, would understand that “n” is a common notation representing an integer variable. For example, if there are 10 voice channels, and $n = 3$, then the n-loudest channels are the three loudest channels among the 10. Since the meaning of “n” is clear, Assignee respectfully submits that the section 112 rejection should be withdrawn

V. Claim Rejections – 35 U.S.C. § 102(e)

Claims 1, 6, 9, 11, 15, 17, 22, 25, 27, and 30 were rejected pursuant to 35 U.S.C. § 102(e) as being anticipated by Whynot et al. (U.S. Patent Publication No. 2004/0267882).

A. Independent Claim 1

As amended, independent claim 1 recites a feature that was disclosed in previous claim 2; and thus, the 35 U.S.C. § 103(a) claim rejection for claim 2 will be addressed with respect to claim 1.

The pending claims define innovations that distribute voice conference processing from a single microprocessor (MP) to multiple MPs in a MP group (paragraph [050]). With multiple MPs supporting the voice conference, the participants of the voice conference

encounter a consistent voice conference experience, even as the conference grows or shrinks (paragraph [051]). In contrast to the claimed innovations, a participant of a single MP supported voice conference may experience increased delay as the conference grows due to increased processing responsibility of the single MP.

The claimed innovations distribute voice conference processing to multiple MPs supporting the voice conference. Figure 4 shows an example of distributing voice conference processing. In the example of Figure 4, the MP 102 includes a network interface configured to receive from endpoint EP1 incoming voice conference traffic representing a first portion 402 of a voice conference (402 + 404). The first portion 402 is transmitted through the network interface to a distribution device (e.g., “Switch”) that multicasts the first portion 402 to at least a second media processor MP2 assigned to process a different portion 404 of the voice conference (402 + 404). This exemplary process is described in the Specification at pages 16 – 18, for example.

In light of the discussion above, currently amended claim 1 recites a processor that is operable to transmit a first portion of the voice conference through the network interface to a distribution device that is operable to multicast the first portion to at least a second media processor assigned to process a different portion of the voice conference. As a result of transmitting only a portion of the voice conference, the claimed subject matter is operable to handle conference traffic with multiple MPs. One benefit of having MPs handle different portions of the voice traffic and then distributing the non-handled portions to non-handling processors is that individual processors will not be overloaded with conference traffic as additional participants join the voice conference. For example, a first processor may only be able to effectively handle two voice channels without the participants experiencing a lag. Once a third participant joins the voice conference, the third voice channel may be supported by a second microprocessor. However, the portion of the voice traffic from the third participant may be distributed to the first processor using the distribution device so that, for example, the first processor can relay the voice data from the third participant to the two participants handled by the first processor.

The Office Action states that Whynot fails to disclose a multicast device, but cites Mody as disclosing a multicast device. The Office Action asserts that it is obvious to

combine Whynot and Mody and that the combination results in the subject matter present in claims 2, 7, 12, 18, 26, and 28. The Assignee respectfully disagrees.

There is no reason to make the Whynot-Mody combination. Such a combination renders the Whynot technology unsatisfactory for its intended purpose [MPEP 2143.01(V) and changes the fundamental principle of operation of Whynot [MPEP 2143.01(VI)]. Whynot requires all the data relating to the voice conference at a single processor. In particular, Whynot wholly switches processing from a first processor 206a to a second processor 206b when a voice call expands beyond more than two participants.

In other words, Whynot advocates having a single processor handle the voice conference. As disclosed by Whynot, “one media processor 206a handles non-conference calls, while a different media processor 206b handles conference calls.” As a result, when a non-conference session becomes a conference session, the MAS 106 transfers the call from the first media processor 206a to the second media processor 206b” (paragraph [0054]). Transmitting only a portion of the voice conference would separate and thus prevent any given processor (e.g., the second processor 206b) from handling the entire voice conference as required by the processing described in Whynot. In Whynot, if only a portion of the voice conference data is received at the second processor 206b, the other portions would have to be handled elsewhere, such as by the first processor 206a. However, if the first processor 206a handles a portion of the voice conference, the principle of operation (e.g., transferring the entire voice conference to the processor 206b) is frustrated. Therefore, the asserted combination would not be able to process the voice conference because all of the conference data is not arriving at the processor 206b. Accordingly, there is disincentive to combine Whynot and Mody, and even if the combination is made, an inoperable system results.

Consistent with the distribution of voice conference processing among multiple processors, currently amended claim 1 further recites that the processor receives a different portion of the voice conference traffic (e.g., handled by a different processor) after multicast of the second portion by the distribution device to the network interface, and forwards the different portion to the endpoints in communication with the processor.

B. Independent Claim 9

As amended, independent claim 9 recites a group of media processors assigned to concurrently support a voice conference, where each media processor in the group is assigned to different voice channels in the voice conference. For example, a first MP may be assigned to process channels 1 – 3 of a voice conference and a second MP may be assigned to process channels 4 – 6 of the same voice conference. Claim 9 further recites distribution circuitry communicates selected voice conference data received from the first media processor in the group to remaining media processors in the group. One benefit of assigned voice channels is that voice conference processing is decentralized. A single processor is no longer responsible for handling all of the channels in the voice conference.

Whynot et al. fail to disclose a group of media processors assigned to concurrently support a voice conference, where each media processor in the group is assigned to different voice channels. As discussed above, with respect to claim 1, Whynot discloses assigning all of the endpoints to a single processor, such as processor 206b. Therefore, claim 9 is allowable over the cited reference.

Furthermore, like claim 1, discussed above, independent claim 9 recites distribution circuitry coupled to a group of media processors, the distribution circuitry operable to communicate selected data received from a first media processor in the group to remaining media processors in the group, and is allowable for at least the reasons discussed above with respect to claim 1.

C. Independent Claim 17

Like claim 1, independent claim 17 recites transmitting a selection portion of a voice conference to a distribution device operable to multicast the first portion to at least a second media processor assigned to process a different portion of the voice conference than the selected portion; and receiving the different portion at the first processor after multicast of the different portion by the distribution device. Therefore, for reasons similar to those discussed above for claim 1, independent claim 17 is allowable over the cited references.

D. Independent Claim 22

Like claim 1, independent claim 22 recites a method for conducting a voice conference that includes receiving first endpoint traffic at a first media processor; transmitting from the first media processor a selected portion of the first endpoint traffic, receiving second endpoint traffic at a second media processor; distributing the selected portion to the second media processor, and receiving the selected portion at the second media processor. As claimed, the second media processor receives a portion of voice conference traffic handled by a first media processor, as well as handling its own portion of the voice conference traffic. Therefore, for reasons similar to those discussed above for claim 1, independent claim 22 is allowable over the cited references.

E. Independent Claim 27

Claim 27 shares features similar to those discussed above in claims 1 and 17, discussed above. Specifically, claim 27 recites receiving instructions that receive from endpoints incoming voice conference traffic representing a first portion of a voice conference at a first media processor; transmitting instructions that transmit the selected portion to a distribution device operable to multicast the selected portion to at least a second media processor assigned to process a different portion of the voice conference than the selected portion; and receiving instructions that receive the different portion at the first processor after multicast of the different portion by the distribution device. Therefore, for reasons similar to those discussed above for claims 1 and 17, independent claim 27 is allowable over the cited references.

VI. Claim Rejections – 35 U.S.C. § 103(a)

Claims 4, 5, 8, 13, 16, 19, 20, 21, 23, 24, 29, and 31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Whynot et al., and further in view of Biage (U.S. Publication No. 2004/0190701). Claims 2, 7, 12, 18, 26, and 28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Whynot, and further in view of Mody (U.S. Publication No. 2003/0206549). Claims 3 and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Whynot et al., and further in view of Schuster (U.S. Patent

No. 6,125,343). Claim 14 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Whynot et al., Biage, and further in view of Schuster.

Dependent claims 2 – 8, 10 – 16, 18 – 21, 23 – 26, and 28 – 31 depend from allowable independent claims, and are allowable for at least this reason. As discussed below, further limitations of the dependent claims are allowable over the cited references.

A. Dependent Claims 5, 14, and 16

Dependent claim 5 recites a processor that determines a net voice conference traffic result of no more than 'n' loudest voice channels from the selected portion of the incoming voice conference traffic and the selected transmission from the second media processor. One benefit of determining a net voice conference traffic result that is no more than 'n' loudest voice channels is that only the 'n' loudest channels are transmitted back to the voice conference. The other, softer channels are not transmitted, which saves processing and prevents processing delays.

The Office Action cites Biage as disclosing the feature recited in claim 5. As cited in the Office Action, Biage disclose a “subtracting mechanism 328 [that] subtracts from the total conference voice signal A+B+C the participant voice signal A to generate the net conference voice signal B+C” (paragraph [0030]). Biage never discloses that the net conference voice signal B+C comprise no more than the 'n' loudest voice channels. Nowhere does Biage explain that the voice signal A is canceled because signals B and C were the two loudest voice signals, such that the result B+C yields the two loudest voice signals in the voice conversation. Therefore, Biage is silent as to the feature recited in claim 5.

Like claim 5, discussed above, dependent claims 14 and 16 recite using an 'n' loudest voice channel and are also allowable.

B. Dependent Claim 10

As amended, claim 10 recites a multicast switch that is operable to communicate the selected data received from the first media processor in the group to remaining media processors in the group. The Office Action relies on Schuster as disclosing this feature. However, as cited in the Office Action, Schuster discloses “[e]xisting audio bridges then re-

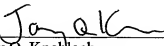
encode the selected analog signal into a G.723.1 format and pass the re-encoded signal back to the participants as an output signal” (col. 5, lines 37 – 39). The Office Action combines the audio bridge in Schuster with the port 214 in Whynot et al. Accordingly, the audio bridge disclosed by Schuster, running in Whynot’s system, would receive signals from the network 104 devices, such as 108, 116, and 102. Once received, the signals are decoded, for example, to determine the loudest voice, and then recoded. Once re-encoded, the bit stream representing the loudest voice is routed back to the devices 108. However, the Whynot-Schuster combination does not disclose, as claimed, using a multicast switch to communicate a first portion of a voice conference received from a first media processor in a pre-defined group to remaining media processors in the same group. Instead, Schuster communicates a bit stream from an audio bridge to the original device. Therefore, claim 10 is allowable over the cited references.

Conclusion

For at least the reasons presented above, the Applicant respectfully submits that the pending claims are in condition for allowance.

The Examiner is respectfully requested to contact the undersigned in the event that a telephone interview would expedite consideration of the application.

Respectfully submitted,



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